



## FORCED AIR SNOW SHOVEL

### CROSS-REFERENCE TO RELATED APPLICATIONS

Not Applicable

### STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

Not Applicable

### REFERENCE TO SEQUENCE LISTING, A TABLE, OR A COMPUTER PROGRAM LISTING COMPACT DISC APPENDIX

Not Applicable

### BACKGROUND OF THE INVENTION

The present invention relates generally to snow moving devices, and more particularly to a snow moving device that may use forced air as a means to remove snow from a horizontal surface. This utility patent application claims the benefit of provisional application No. 60/451,665 filed March 5, 2003

A recurring problem for homeowners and business during the winter months is the removal of snow from sidewalks, driveways and parking lots. Such snow removal is frequently the cause of heart attacks, strokes, and many lesser ailments

such as muscle strains and sprains. The most commonly used method of snow removal consists of the snow shovel, which while inexpensive and simple to operate, requires substantial muscular effort in order to remove any significant quantities of snow. The major problem with the common snow shovel is that the shovel with a load of snow must be lifted and thrown a distance to clear the surface. With the aging of the population, there is a need to alleviate as much as possible the significant burden of lifting and throwing of snow.

Previous attempts to alleviate the problem have concentrated in the area of powered mechanical snow removal devices using either a single or dual auger drive system. These devices are expensive, heavy, and require considerable storage areas. They are also primarily used to move large/deep accumulations of snow.

My invention is intended to address the need of many who have limited amounts of snow to remove and who do not have the space to store a large snow removal device yet still need a choice that will eliminate the need to lift and throw the accumulated snow. My invention, therefore, has the following objectives:

- a. to provide a snow removal device enabling the removal of snow without bending, stooping, or lifting the snow to be removed;
- b. to provide a device which is inexpensive for the consumer;
- c. to provide such snow removal device which is simple to store.

## BRIEF SUMMARY OF THE INVENTION

The present invention provides a snow shoveling apparatus that satisfies the aforementioned need. The snow shoveling apparatus of the present invention has a tubular member that has a lower blade which impacts the snow, attached to the tubular member is a wheeled mobile frame. This configuration will alleviate the need to lift and throw the snow. The wheeled mobile frame is moved across the horizontal surface with the forced air directed through the tubular member thus creating enough air velocity to eject the snow off of the lower blade.

## BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING

In the following brief description, reference will be made to the attached drawing in which;

FIG. 1 is a perspective view of a forced air snow shoveling apparatus of the present invention.

FIG. 2 of the drawing is a side view of the tubular portion of one embodiment of the invention, as well as the vertical and horizontal shafts of the mobile frame.

FIG. 3 is a frontal perspective of the mobile frame of the apparatus.

FIG. 4 of the drawing is a top view of the invention, showing in particular, the tubular portion of the apparatus, the lower blade means with support ridges, as well as the supporting mobile frame.

#### DETAILED DESCRIPTION OF THE INVENTION

Referring to the drawings and particularly to FIG. 1, there is illustrated a forced air snow shoveling apparatus of the present invention; generally designated (10); the tubular member (11) basically includes a mobile frame (12) FIG. 3.

In the illustrated embodiment (FIG. 3), the mobile frame (12) includes a vertical shaft1 (20) and a vertical shaft2 (22), a horizontal shaft (34), an axle (28), and a pair of wheels (26). The tubular member (11) and the mobile frame (12) (embodiments illustrated in FIG. 1), are made of a substantially rigid material, such as plastic or the like. The tubular member (11) being cylindrical in design is fabricated in one continuous piece as shown in FIG.2. In the illustrated embodiment (FIG.3), the vertical shaft1 (20), vertical shaft2 (22), horizontal shaft (34), and axle fork (24) of the mobile frame (12) is made of a substantially rigid material such as plastic or the like. The mobile frame (12) assembly comprises an axle fork (24), an axle (28) mounted to the axle fork (24), and a pair of wheels (26) attached to the axle (28). The axle (28) has opposite ends laterally spaced in opposite directions from the axle fork (24) and rotationally mounting the wheels

(26) which are of any suitable type. The wheels (26) provide lateral stability of the mobile frame (12) and preferably are identical to one another. The wheels (26) are rotatable in clockwise or counterclockwise and lateral direction relative to the axle fork (24) and axle (28) such that the forced air snow shoveling apparatus (10) may be moved along a surface by means of pushing or pulling.

Referring now to FIG. 2, the tubular member (11) is comprised of a substantially cylindrical configuration with a lower blade (49) for accumulating snow. The tubular member (11), and lower blade (49) are fabricated from one continuous piece of plastic or such like material. The lower blade (49) has three nozzle openings (ports) allowing for the forced air to be directed over the full surface of the lower blade (49). The tubular member (11) includes connector pin holes (40), (42) and (44). These connector pin holes (40), (42) and (44) allow for the attachment of vertical shaft1 (20) and horizontal shaft (34) to the tubular member (11). The height of the mobile frame (12) can be adjusted by raising or lowering vertical shaft1 (20) and vertical shaft2 (22), and adjusting the pressure of the tension pin (36) against the vertical shaft1 (20).

Referring now to (FIG.4), the illustrated forced air snow shoveling apparatus (11) is displayed in a top view.

List of Referenced Numerals Utilized in the Drawing:

Forced Air Snow Shoveling Apparatus	10
Tubular Member	11
Mobile Frame	12
Vertical Shaft1	20
Vertical Shaft2	22
Horizontal Shaft	34
Axle	28
Wheels	26
Axle Fork	24
Lower Blade	49
Connector Pen Holes	40/42/44
Tension Pin	36